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ETHNOLOGY.—*Bird nomenclature and song interpretation of the Canadian Delaware: An essay in ethno-ornithology.*[1] FRANK G. SPECK, University of Pennsylvania. (Communicated by HERBERT FRIEDMANN.)

This study is offered as an incentive to ornithologists and ethnologists concerned with the topic of bird life in its broadest sense.

To this end an attempt is made here to show the extent of notions possessed by the Canadian survivors of Indians constituting the Delaware Nation, whose earlier historic habitat was in the latitude of the Middle Atlantic Slope. It would accordingly not be easy to draw definite conclusions as to the regions in the East where the elements of Delaware birdlore were endemic. The Delaware have dwelt in Ontario for a century and a half. This makes it possible that their knowledge may be derived from bird observations in that locality. Or it may, on the other hand, refer to the regions whence the tribes once migrated.

We are aware that the question as to the quality of appreciation of nature among uncivilized people has long been an open one. One may assume obstinately that artificial sentiments toward nature transmitted in European tradition, in poetry, and in contemplative literature of the pastoral and reflective type come only from the writings of the nature dreamers.[2] It is, therefore, not easy for many to decide whether nature literature, purely oral of course, existed at all among preliterate peoples, for it has not been given attention by early observers who described their life ways. It is only European writers who have left accounts of native beliefs and notions, and they seldom gained insight into native feelings and cogitations regarding nature intimately enough to treat the matter subjectively. In short, whereas the growth of nature thought is preserved for us in written records, for that of aboriginal peoples we are dependent upon tradition handed down by word of mouth.

Now, however, the field takes on a wider horizon, one that must include tribes of so-called uncivilized levels whose attitude toward nature was not affected by the European aesthetic tradition. Boas thought nature appreciation to be a universal trait, observing as follows. "Aesthetic pleasure is felt by all members of mankind. No matter how diverse the ideals of beauty may be, the general character of the enjoyment of beauty is of the same order everywhere."[3]

If the Delaware Indian confides to his companion that the roar of the wind swishing through the summits of pines is the voice of the trees giving devotion to the Creator, if the Naskapi of Labrador whispers to us that when the trees on the hillside bend under the force of the wind it is the hand of the Supreme Being combing the hair of his children, should such thoughts not be placed alongside the exalted voice of Isaiah who proclaimed: "The mountains and the hills shall break forth before you into singing, and all the trees of the field shall clap their hands." However, the theme now before us revolves about

[1] Received May 3, 1946.

[2] An interesting and thought-provoking dissertation surveying the background of these ideas is given by PHILIP MARSHALL HICKS, *The development of the natural history essay in American literature*, Philadelphia, 1924. See also *Nature in American literature*, by NORMAN FOERSTER, New York, 1923.

[3] FRANZ BOAS, *Primitive art*, Instituttet for Sammenlignende Kulturforskning, Oslo, 1927, p. 9.

birds, not trees. It deals with the casual bird-mindedness not of early man in general but of a small group of Indians in Canada, the Algonkian-speaking Delawares, and explores entirely new fields of thought and observation in natural history for which there is, as yet, no system of orthodox investigation. A short historical review of the people's past is apropos.

Almost two centuries have passed since the historically famous bands of the Delaware Nation departed from their original haunts in the valleys of the Delaware and Hudson Rivers and their tributaries in New Jersey, eastern Pennsylvania, and eastern New York State. Through vicissitudes of the earlier century of alternating peace and strife with Dutch, Swedish, and English administrators and colonists, the settlements of natives composed of fugitive elements from as far east as Massachusetts and Connecticut succeeded in preserving their entity as members of a confederacy of prostrated small peoples. They became part of the loose political body known in later history as the Delaware Nation. That they still maintain this political status in the League of the Six Nations Iroquois in Ontario is fortunate for students of history, ethnology, and linguistics.

They have resided since about the middle of the eighteenth century in the basin of Lake Erie on its eastern extremity, and some 40 miles north of it, in a mixed prairie and deciduous forest horizon of the Alleghenian Life Zone. This habitat is important to hold in mind for reasons of avian distribution and environment. Assuming that ecological factors have to be considered, after migration of the people from a more southerly latitude, one can scarcely fail to wonder how much of their tradition is rooted in experience in Ontario. The migration to southern Canada would remove the people from the range of certain bird types of the middle states and bring them into that of some northern forms.

This paper covers one aspect of the knowledge still preserved in the band, treating the subject of its birdlore as known to a few of the elders in the group who are still conversant with the Delaware idiom.[4]

Concerning the idiom itself in which the bird names, calls, and some interpretations are given, it may be said that the grounds for assigning to it a single name coincident with any of the tribal names are not yet sufficiently adequate to permit more than a hyphenated classification, i.e., Munsee-Mahican. In a recent paper I have assembled the opinions of other investigators among the Six Nations Delaware (Brinton, Harrington, Michelson) who classified it as a Munsee dialect (Speck, 1945, pp. 7–18).[5] Upon closer examination of its morphology, vocabulary and phonetics, one gains the impression that Mahican contributions to the speech of the group in question are in evidence sufficiently strong to make the suggested hyphenated classification advisable for the present. The insistence of the people themselves in declaring that they are Wapanachki (Wabanaki), as are the Mahican, has been found to be valid beyond serious question. Through recent accumulation of material from its speakers a closer affinity has been discerned among Wabanaki dialects of northern New England than has hitherto been ascribed to them. This point, I believe, will appear more firmly supported in considering both speech and cultural composition of this group when the ornithological vocabulary to be presented is viewed against that of the Wabanaki proper, living to the eastward. With these suppositions I propose to leave open the question of constituency of the band until it can be better ascertained. Briefly, the Delaware group from which the bird notes have been recorded on the Six Nations Reserve is, according to historical testimony, an ethnic composite group; its dialect is a conglomerate of Wapanachki (Wabanaki) and Algonkian speech forms, and its birdlore is similarly constituted.

A word is called for as to the identification of birds and the use of English names for species by Indian people who know the

[4] The field work of 1944–45 carried on among these people received substantial support from the Faculty Research Fund of the University of Pennsylvania, Grants 555 and 570.

[5] F. G. Speck, *The Celestial Bear comes down to earth; The Bear Sacrifice Ceremony of the Munsee-Mahican of Canada as related by Nekatcit*, Reading Public Museum, Reading, Pa., 1945.

local names only by association with English-speaking communities adjacent to the reservation. The Delaware informants were often confused over bird name-identities in English and the correspondence of those terms with their own taxonomy. The Delaware bird category indeed also shows, as might be expected, some confused identities under a single name.

The Delaware informants were, as we found, acquainted sufficiently with local bird types to identify and give their own names for about 70 species. Some years ago I incidentally undertook by similar means of the ethnological approach to record names and knowledge of birds in central Maine from an aged Penobscot hunter (Wabanaki of northern New England) and published the material where it has seldom been encountered by ornithologists or ethnologists.[6] The Penobscot bird list and nomenclature accounted for about the same number of species, seventy-two, as among the Delawares. Linguistic and historical implications with the Delaware data now presented are evidence. A rather strange coincidence develops, that informants in both groups could name about the same number of birds through their experience in the bush by what we may call casual knowledge and that a noteworthy proportion of them are similar despite the differences in environment of the two Algonkian divisions.

Realizing accordingly the inadvisability of relying upon bird listing with native names from the dictation of Indians by using only name identities in English, I resorted to the color figures and factual data given in Reed's handbooks.[7] This pocket edition was used to check the identities given and to supplement attempts to control the data. Having used these pocket bird manuals on frequent occasions in recording ethno-ornithological data among Indian tribes in northern and eastern North America, I have invariably found them satisfactory. Native informants likewise respond with warm interest to the stimulus of seeing illustrations emphasizing those characteristics which would enable identification to be made without relying upon mere names. In all, it should be noted that the matter as presented is not specifically ornithological but folkloristic.

The native informants whose knowledge is now recorded were Josiah Montour, born 1872, whose Delaware name is Xkó·kwsis, "Little Snake," a descendant of the historically celebrated Roland Montour, of early Mahican descent; Mrs. Jane Battice, his sister, born 1867; Jesse Moses, Sr., born 1869, likewise of Mahican extraction; his nephew Jesse Moses, Jr.; Nekátcit, born in 1859, known by the English name of Nicodemus Peters. Other sources when referred to are given in footnotes.

The system of representing sounds throughout the paper follows the use of English characters where possible, though with some different values in cases where the native terms are not reproducible in the English alphabet; for instance *c* represents English *sh*, *x* the *ch* in German as in *"bach"*; Greek alpha *α*, the *u* of English *but;* ɔ (reversed *c*) as *aw* in English *law*, the inverted ə an obscure vowel equivalent to *e* in English *flower*. Syllable accent is denoted by ′, nasalization of vowel by the cedilla beneath, and the aspiration, as the initial *h* of English, by ‘. Crossed *l* (*ł*) is sounded like *thl* (Welsh *ll*) and *θ* like *th* in thin. By observing these variations in the sound values of English orthography, the reader should be able to reproduce the bird names with sufficient accuracy to be understood by the Delaware.

BIRD CALLS, SONGS, AND INTERPRETATIONS

Students of bird life, writing popularly or scientifically, have been inclined to attempt to transliterate what they think they hear birds utter or exclaim. The re-

[6] F. G. Speck, *Bird-lore of the northern Indians*, Public Lectures by University of Pennsylvania Faculty, 1919–20, 7: 380, Philadelphia, 1921.

[7] C. A. Reed, *Bird guide: Water birds, game birds, and birds of prey east of the Rockies*, 1910, and Part 2, *Land birds east of the Rockies*, 1912. The writer wishes to acknowledge the invaluable aid rendered in making the recordings by Ernest S. Dodge, curator of ethnology and natural history at the Peabody Museum, Salem, Mass., and his wife, Irene D. Dodge, who were members of the research party at work on the Six Nations Reserve, and participated in the bird sessions with the Delaware informants throughout the period of recording.

ception of such sounds by different ears seems to vary according to the national and linguistic tradition of the listeners. It is generally admitted, in fact candidly assumed, that few if any successful attempts have been made to describe bird songs and calls in English syllables. People in all ages and areas have tried to make nature talk in their own tongues. The humanizing of animal and even plant life has known no limit in folk tradition. Bird utterances have been a favorite playground for human fancy. The Delawares, as well we shall now see, have been as productive in word renderings of this character as the English. And like the latter their taxonomy has drawn its sources largely from avian call syllables. Just how these utterances could be endowed with sense aside from a rough resemblance to sounds, who can see? How the singing words of birds as heard by Delaware ears compared with English ears or with real vocables in any language, we can judge. It is worth noting at this point that the Indians nowhere associate bird calls with human names nor do they associate them with personalities. Who are the personalities that English tradition associates with bird memories; Bob White, Poor Will, Bob (Robert) Lincoln, Will's Widow, Mr. Peabody, for instance?

In the Delaware bird identities listed I have arranged the creatures in two groups determined by linguistic derivation of names. One is descriptive, the other onomatopoeic, the grouping in some cases optional, forty of the listed names being in the descriptive group, and twenty-three in the onomatopoeic list. It is a purely arbitrary one; a new manner of viewing source material obtained from preliterate natives. It does not follow any arrangement recognized by the Indians themselves or by students of bird life. The people, however, have devised a rough classification of birds by form and habit, since we find owls, hawks, ducks, woodpeckers, swallows, and some small birds to be designated by collective terms, and some subdivisions specified.

The generic term for bird is *awe'łe's·us*, and has reference to a creature having the power to go by flying. The final syllables *-łe's·us* appear in a large proportion of bird names, sometimes shortened to *-łes* or *-łe'o*, "he who flies," in some names, as the listing shows. The plural suffix *-(w)ak* denotes the animate classification of birds with other living organisms.

Among the Delawares now living in Oklahoma who branched off from the Canadian divisions before the American Revolution, an entirely different term denotes the Aves, namely *tcólạs*. Its etymology can not be clearly traced. Among the Six Nations Delawares (Munsee-Mahican speaking) another generic term is found, namely *ji·ts*, for birds in general.

Turning eastward to the Wabanaki tribes of Maine, New Brunswick, and Province of Quebec, we find the corresponding class designation to be *si·ps* (St. Francis Abenaki, Penobscot, Malecite), *sisip* (Micmac). Among the Mahican proper of the upper Hudson Valley as well as the Mohegan-Pequot of Connecticut, related inclusive terms are found, i.e., *ji·ts* and *dji·ts*. This substantive is evidently onomatopoeic.

The same second position elements *(-łésv(s), -es·)*, just given in the Canadian Delaware series, appear in Wabanaki bird name endings; *-łés·u*, and *-es·* (shortened form).

At this point it would seem apropos to mention that the Delaware, like other Algonkian peoples of the East, hold the impression that bats are classifiable with the birds. The tribe in question applies the name *pápi·səlɑɣgwunés*, "skin-wing bird," to any of the bats. The related Wabanaki of northern New England call the bat *madégani·łés·u* ,"skin (hide) bird" (Penobscot and Malecite), *madagani·łás* (St. Francis Abenaki). The mysterious bat has, indeed, been given an ambiguous zoological classification among many peoples of the world, as the word-traditions of both New and Old World languages show.

To the judgment of an ornithologist the list of species will seem incomplete for the region inhabited by the Munsee-Mahican Delawares. That a number of birds are conspicuously missing from the list is apparent. Many more might be thought to have received names with more or less accurately observed characteristics and identities. The

two or three members of the Indian band who knew the language, however, were aged persons possessing little more than a casual acquaintance with bird life. Despite the time and effort given to questioning and the display of bird pictures, their vocabulary of native bird names was limited to those given here—and some of them uncertain as to identity. Mistakes moreover inevitably lurk in the listings of native names with bird identities, for which informants and recorders are both responsible.[8]

BASICALLY DESCRIPTIVE BIRD NAMES

Mäxkələnéo, "snake bird," (?) red-tailed hawk (Buteo borealis (*Gmelin*)): This hawk is said to seize a snake and carry it high, soaring before an approaching storm. The Oklahoma Delaware name is the same as the above.

Weteɪcócɔcɑlnéʻniːtɑt, "small bird killer," sparrow hawk (Falco sparverius *L.*).

Wápalanéo, "white bird," marsh hawk (Circus hudsonius (*L.*)).

θəniːléo, "stone bird,"—Wapándəp wétesːu, "whitehead bird,"—Mockándəp awéteo, "baldhead bird," bald eagle (Haliaeetus leucocephalus (*L.*)): The last name may have arisen through association with local whites. In the Delaware language of Oklahoma the name is *áixam.*

Míːmiːo (*meaning unexplainable*), *passenger pigeon* (Ectopistes migratorius (*L.*)): The meaning of this proper name is lost to the informants. It is therefore optional whether to list it with the descriptive names or to regard it as onomatopoeic. Josiah Montour recalls that in his youth these birds were common and that the people used a fifteen-foot pole to knock them down from the trees where they roosted. The Delawares of Oklahoma call the bird *amíːmi.* In the Wabanaki tongues its name is of a different derivation; *blɔs* (Penobscot), *pɔláz* (St. Francis Abenaki), *ples* (Malecite), *polis* (Micmac)—terms whose etymology is not revealed.

Mowíːleo, "moaning bird," mourning dove (Zenaidura macroura carolinensis (*L.*)): The name is descriptive only in that it refers to the voice of the bird which announces impending misfortune or death to some member of the community. In Oklahoma the Delawares have expanded the idea of its voice into a phrase name, *mámendhákema,* "one who prays (or pleads) earnestly," and hold the dove in high sentimental esteem. Unlike the latter, the Canadian Munsee-Mahican have no sentiment against killing and eating the dove.

Tcúxkwiːs, "diver"—Aháp'tcalámwiːs, "holds breath when dives,"—Tcúykhiːs, "little (bird)," mud-hen, horned grebe (Colymbus auritus (*L.*)); *helldiver* (Podilymbus podiceps): These two birds of the waterways were so confused in identity that the informants could not agree on their correct names. On account of its body shape the "helldiver" is jokingly called *ópɔnɑk,* "potato." The bird figures in folklore of Algonkian peoples almost everywhere as a butt of humor. Penobscot and Malecite give *asóps* for its name.

Wápθowé ɪe, "white bird," wild goose (Branta *sp.*): The Wabanaki names refer likewise to whiteness; *wámptogwe* (Penobscot) *wáptuk* (Malecite), while it is *mogəlé wite* in Micmac.

Sək cíːhweo, "black duck" (Anas rubripes tristis *Brewster*): The generic term *cíːhwe* for duck goes back to a stem (*ciː*) for this bird group fairly uniform over a wide area in the East and North. Whether it is basically a mimetic sound or not is not easy to conclude. The generic term for duck in Eastern Wabanaki is *mədəhésːim.*

Xwás(θ) cíːhweo, "wood duck" (Aix sponsa (*L.*)): The name is another of the few Delaware terms listed that have been taken over from local white hunters. Other species of duck if referred to by the Delawares would be described by adjectives corresponding to their local English names.

Pəléo, "chewer (?)," wild turkey (Meleagris gallopavo silvestris *Vieillot*), (*also the domestic race*): Usage has adopted a different descriptive name for the bird among the Delawares of Oklahoma who call it *tcíː kənəm,* "he scratches (the ground)." A different series of name stems prevails in Algonkian languages to the eastward. They seem to be mimetic in origin, descriptive in usage—*néheme* (Penobscot), *nahamá* (St. Francis Abenaki), *neʻp* (Malecite), *neyhom* (Narragansett, Roger Williams).

Äʻkwáləne, "sleeps through the day," long-eared owl (Asio wilsonianus (*Lesson*)); *great*

[8] The nomenclature used in this report is taken from FORBUSH, E. H., and MAY, J. B., *Natural history of the birds of eastern and central North America,* Boston, 1939.

horned owl (Bubo virginianus (*Gmelin*)).

Lôni· k'hókos, "common, or original owl,"—Xóweygewi· k'hókos, "old fashioned owl," barred owl (Stryx varia *Barton*).

Wápi· k'hókos, "white owl," snowy owl (Nyctea nyctea (*L.*)): Essentially the same in the Wabanaki languages.

Káxwemwi·s, "killer," screech owl (Otus asio naevius (*Gmelin*)): Wabanaki cognates are *kamkámes·v* (Penobscot), *kapkámə·* (Malecite).

Tcáyga k'hókos, "little owl," saw-whet owl (Cryptoglaux acadica (*Gmelin*)): Some difficulty was met with among informants in reaching conclusions over the identity of the owls in their own language. The questions were finally settled as given above, the identities of the two larger forms made by their vocal efforts. The term *k'hókos* is uniform for the series with minor variations over a wide area where Algonkian languages are spoken in the east, as the following examples will show: *kóhus* (Oklahoma, Delaware), *kokhokhas·v* (Penobscot), *kok'okhás* (Malecite), *kúkugwés* (Micmac).

Sək' awéteo—Sək' awéteo, "black bird," crow (Corvus brachyrynchos *Brehm*): *Á·hasu* (see under Onomatopoeic names).

Putci·lí·letés·us, "butcher (derived from English) *bird," butcherbird* (Lanius *sp.*): The name deserves no further comment than to mention its English origin indicative of a kind of borrowing with loss of the native equivalent.

Tcatcanáxaxkwes, "striking at hazard on a tree," hairy woodpecker and downy woodpecker (Dryobates villosus (*L.*), D. pubescens (*Swainson*)).

Éyoθ awéteo, "dips while flying," flicker (Colaptes auratus luteus *Bangs*): There is no cognate to this name in Wabanaki idioms. The Penobscot term is *táwalotc.*

Lexáwaní·tcis; "fork-tail (swallow)," purple martin (Progne subis (*L.*)); *barn swallow* (Hirundo erythrogaster *Boddaert*): No differentiation of forms could be traced among informants.

Né'ni·mtcémwɔθ (né'ni·mtcéo), "lacrosse player," chimney swift (Chaetura pelagica (*L.*)): The bird's erratic motions in the air suggest the movements of Indian ball-players contesting to score a goal. Contrast this ancient idea in the name with the Penobscot *tcímili·tas·is,* "chimney bird."

Lí·li·tcas—Mi·lí·tcas, "smelling around (flowers)," hummingbird (Archilochus colubris (*L.*)): The variations in word form are given as pronounced by Josiah Montour and his sister, Mrs. Battice. In the Wabanaki speech we have *ani·tás·is,* "the hoverer" (Penobscot), *nanatás·is* (St. Francis Abenaki), *yalamés·it* (Malecite), with the same meaning.

Célamxákwus, "under the log," house wren (Troglodytes aedon *Vieillot*): The secretive flight habit of the bird is explained in folklore as being due to fear of the "lion" by day. A similar idea of the bird's habit is revealed in the Penobscot name *alɑmłabíkəs·i·s,* "under hiding bird."

Lawákaník·ɑn wéłes·us, "middle of field bird," horned lark (Otocoris alpestris *subsp.*).

Ólələn·e, "blue tail (?)," wood thrush (Holocichla *sp.*): There was some doubt in the informant's mind whether this name was onomatopoeic or descriptive.

Á'ki·hes·, "planting bird"—Ehá'ki·es·, "farmer bird," mockingbird (Mimus polyglottos (*L.*)): A rendering of the profusion of musical syllables uttered by the bird in question has become a tradition among the Delawares of this band. To their ears the following phrase is a repeated admonition to plant corn to ward off famine. It goes *tokí· tokí·k ehakí' ehakí ski· ski· kəmút* (with variations), *"tokí'tokí·k* plant! plant! urinate! urinate! (to fertilize?) (lest) you steal!" Its arrival in their territory is accordingly a sign for the industrious to begin farming, and a warning to the slothful to avert the necessity of pilfering the crops of others in the season of harvest. The transliteration is furthermore a specimen of aboriginal humor.

Considerable discussion arose among three of the Delawares over the specific identity of this bird. The question centered about its appearance in the territory inhabited by them. An examination of ornithological literature on distribution of the bird allows for the possibility of its occasional appearance north of Lake Erie. Inasmuch as the mockingbird is a nonmigratory species and seldom gets to Canada, the present bit of folklore may possibly be a relic of the southern, pre-Canadian lore of the Delawares.

The Indians of the Reserve expressed no uncertainty of the identity of the mockingbird as distinct from the brown thrasher. Illustrations and a lengthy discussion of the differences in color of the two birds failed to convince them

of possible confusion of the two. They assigned a distinct name to the latter and were aware of the distinctions in feather markings characteristic of both forms. The conclusion was therefore reached that the mockingbird was known to them by observation and by name, and so the matter will be left for treatment by students of bird distribution in Canada to be checked by expert observation. In Oklahoma the Delawares, who are without question familiar with the mockingbird, designate it by reference to its polyglot gift, *nehəni·sk'tónhes*, "he talks about something."

Otán awéles·us, "*town bird*," *English sparrow* (Passer domesticus (*L.*)): This term indicates the late acquaintance of the people with the introduced species and correct observation of its preferred habitat.

Lən·owéles·us, "*common* (*or native, original*) *bird*," *chipping sparrow* (Spizella passerina (*Bechstein*)): The distinction between this species and the preceding lies in the recognition of their nativity.

Ci·ksánəle, "*spread tail-feathers*," *kingbird* (Tyrannus tyrannus (*L.*)): The bird's name is "belittler, scorner" in the Wabanaki area, *mesándjes·u* (Penobscot).

Wí·sawelés·u, "*yellow bird*," *Baltimore oriole* (Icterus galbula (*L.*)); *yellow warbler* (Dendroica aestiva (*Gmelin*)): This name is applied possibly to the American goldfinch male in summer plumage, as far as could be learned from the informants.

Apatcémwes, "*come back bird*," *meadowlark* (Sturnella magna (*L.*)): The name has reference to its return north in the spring.

Pki·hixkalάygwes, "*looking close for something*," *crossbill* (Loxia *sp.*); *nuthatch* (Sitta *sp.*): The same name was given for both birds without possibility of clarification.

Ci·wə́pekli·s, "*blue bird*," bluebird (Sialia sialis (*L.*)).

Áxkokweldəpwi·l, "*cook snake head*," *redwing blackbird* (Agelaius phoeniceus (*L.*)).

Cikáks awéles·us, "*skunk bird*," *bobolink* (Dolichonyx oryzivorus (*L.*)).

Kówi awéles·us, "*cow bird*," *cowbird* (Molothrus ater (*Boddaert*)): Observation by the Delawares has resulted in the same name prevalent among the whites.

Cəwáni·les, "*south, or salt-water, bird*," *snipe* (Capella delicata (*Ord*)); *woodcock* (Philohela minor (*Gmelin*)): Either translation given is applicable to the species mentioned. The reference to salt-water indicates the former residence of the tribe on the middle Atlantic coast and may therefore be an ancient name carried to Canada in the migration of two centuries ago.

Xwátcə cəwani·les, "*big south, or salt-water bird*," *killdeer* (Oxyechus vociferus (*L.*)).

E'ki·ndjis, "*little counting bird*," *brown creeper* (Certhia familiaris americana *Bonaparte*): So named from its habit of moving up and down the bark of trees as if counting out or searching for something.

BASICALLY ONOMATOPOEIC BIRD NAMES

Mális—Méli·s, *phoebe* (Sayornis phoebe (*Latham*)): The 2-syllable equivalent of the call given by these birds seems to be the basis of their inclusion under one name of reference.

Tcəyga méli·s, "*little méli·s*," *wood pewee*[9] (Myiochanes virens (*L.*)).

Tcúkwalè, *blackbird* (*sp.?*) (bronzed grackle, and even red-wing blackbird according to one source): Again a resemblance to Mohawk (Iroquois) *djókwari·s* denoting the same bird. The corresponding Wabanaki name *tcəgwulúsk* also refers to the last two birds whose identity is combined in Penobscot and Malecite. The Oklahoma Delawares depart from the term in calling them *tckənák*^{w}. That this is an ancient name for the blackbird among tribes of the Atlantic slope area is revealed by the entry in Edward Topsell's manuscript (circa 1614) giving "chugwareo" for the red-winged blackbird in the Virginia Indian language.[10]

Ti·ti·s, *bluejay* (Cyanocitta cristata (*L.*)): The term is fairly constant in the East; *di·dias* (Penobscot), *títias*, *tides·ó* (St. Francis Abenaki), *títis* (Micmac).

Tci·ckó'kos, *robin* (Turdus migratorius *L.*): A certain uniformity is to be observed in

[9] On the islands off the coast of southern Massachusetts the name "moneybird" is given to the chickadee, phoebe, and wood pewee. The birds' calls are heard as equivalent of "taubut," meaning "thank you" in the Algonkian speech of the Southern New England Indians, the thanks being intended for the money that the birds refer to as about to be found. To these Indians the chickadee is understood to say the same thing and is likewise called the "moneybird" (information Mrs. C. Ryan, Gay Head Indian settlement, Marthas Vineyard, Mass., 1925).

[10] J. R. Swanton, *Newly discovered Powhatan bird names*, Journ. Washington Acad. Sci. **24**: 97–98. 1914.

names for the bird in native languages of the East irrespective of their linguistic affinities. For instance the Cayuga and Mohawk (Iroquoian stock) of the Six Nations Reserve and adjoining the Delawares denote the robin by *tcí·ckogo*. The Delaware name is evidently related to the Mohawk, not to the Wabanaki term *wi·kwúskesu*. There was a Robin Dance in the ceremonial cycle of rituals of the tribe.[11]

Kaxkówes, brown thrasher (Toxostoma rufum (*L.*)); *cuckoo* (Coccyzus *sp.*): *Kax kax* is understood as the sound of their call notes, whence is derived the name of the birds that emit those syllables.

Máxkʷtci·li·lí·s, chickadee (Penthestes atricapillus (*L.*)): The onomatopoeic portion of this term (*-tci·li·lí·*) occurs in chickadee names among Indians over a wide area of the East, examples of which are given. The constancy of the name in various unrelated families of speech is evidently due to the clearness of utterance of the bird's canto in the acoustics of most people. That the common English name chickadee is Indian origin in America may not therefore be unreservedly true. The Penobscot equivalent is *ktci·gi·gi·łás·i·s*. Even the faraway and unrelated Cherokee of North Carolina give it the name *tcikili·lí.*

Pi·ckʷ, nighthawk (Chordeiles minor *Forster*)): The onomatopoeia in this case is an excellent echo of the bird's call note. Ornithologists have recorded a close equivalent, *peent* (F. M. Chapman, *Handbook of birds of eastern North America*, 1903, p. 238). A larger variety of the creature is said by the informants to exist in the country, called *xwátcəpi·ckʷ*, "big nighthawk." A popular belief also says "if a piece of deer meat is burned when it appears it will come down to earth, otherwise it never does." Josiah Montour mentioned another old folk belief that the bird fears the "lion" by night, as the wren does it by day, thus accounting for its erratic flight.

Related forms of the same name are found in other eastern dialects, *pick* (Oklahoma Delaware), *pesk* (Penobscot, Ojibwa), with only slightly variant forms in Iroquois Cayuga.

A formal term denoting the nighthawk is *pí·ckwəlanéo* when its name is referred to as the title of a mimetic dance in the series of rites anciently performed in the Delaware Long House. The Nighthawk Dance was a ritual in which certain dancers carried feather wands. It symbolized peace and war as antagonisms which are believed to be demonstrated in the character of the bird (Speck, 1945, p. 76) arising through the booming sound produced by the bird in flight. It is connected with the myth of thunder which symbolizes aerial and terrestrial warfare.

We'kóli·s (*wé'kwəlí·s*), *whippoorwill* (Antrostomus vociferus (*Wilson*)): The sound quality of this bird's voice is given in a 3-syllable imitation of its call noticeably constant in native languages of the East. The name series is most interesting.

In Oklahoma the Delawares hear the bird's call as *tcolulhówe*. In the central Algonkian and New England dialects the equivalents hold closer to the Canadian Delaware, viz., *wákowis* (Saulteaux), *wahonési* (Ojibwa, Lake Timagami, Ontario) (given as *wawonaissa* by Longfellow in Hiawatha), *kukuwé* (Fox of Oklahoma), *mɑkowi·s*, "little child or dwarf" (Mohegan), *wi·polés·* (Penobscot), *papolés* (St. Francis Abenaki), *wekwi·i·tc* (Micmac). The linguistically unrelated Cayuga (Iroquois of Six Nations, adjacent to the Delawares) call it *gwękuyé'*, while the Catawba (South Carolina) linguistically distinct from all of the preceding give a similar sound-form *witkoyą́*, and the Cherokee (North Carolina) *wagulí·'*. Finally we note the interesting form of the echoic name among the Dutch settlers of the lower Hudson Valley as *quote-ker-kee*, recorded by Neltje Blanchan (*Bird neighbors*, 1922). The Canadian French hear the call as *pois pourri*, or "rotten pea." To none of the northern people is the bird's presence a happy omen. The poetical fancy entertained by the southern Indians that the whippoorwill does not appear until the ladyslipper (*Cypripedium acaule*) blooms so that the bird can use it for a hat is not revealed by inquiry among northern tribes so far (F. G. Speck, *Whippoorwills, nighthawks and ladyslippers*, Gen. Mag. and Hist. Chron., Univ. Pennsylvania **36**: 595. 1934).

Máxkawelɛs·—Máxkawelɑ́ci·c, "red bird"; Sótcəl awelɑ́sos, "soldier bird," scarlet tanager (Piranga erythromelas (*Vieillot*)): The first name listed was given by Nicodemus Peters

[11] F. G. Speck, *The Celestial Bear comes down to earth; The Bear Sacrifice Ceremony of the Munsee-Mahican in Canada as related by Nekatcit*, Reading Public Mus. Sci. Publ. No 7: 74. 1945.

(deceased 1938), the second by Josiah Montour. The latter has reference to the red-coated British soldier so familiar to Indians a century ago.

Kaskáskwəli·s, song sparrow (Melospiza melodia (*Wilson*)): The sound phrase is considered to be a close reproduction of the first part of the spring melody of the bird, and from this its name is derived. The full equivalent of its utterance is "kaskáskwəli·s asi·'takəlá's, məsá'si·tepók." The last word of the phrase is interpreted to say "cold feet." The reference to cold feet indicates the suffering that the bird expects to undergo before steady warm weather starts in during the uncertainty of a belated spring.[12]

The Delawares are conscious of the similarity of their own name for the bird to that given it by the neighboring Mohawk, who interpret its song as saying "kaskáskəli· sa'si·takalá's," "your foot smells foul."

Equally expressive is the Penobscot euonym *sulsulsuwí·* for the song sparrow. The tunefulness of names given the bird in many eastern dialects is noteworthy among people of the northern latitudes who perceive the return of spring in the singing syllables of such a melody as is given forth. In Malecite the term is practically the same (*sulsulsulí·*) while St. Francis Abenaki has *kaskaldjás*, a closer analogy to the Delaware name.

Tcuwí·yu', *towhee*, Pipilo erythrophthalmus (*L.*)); *catbird*, Dumetella carolinensis (*L.*)); *bobolink*, Dolichonyx oryzivorus (*L.*): It may be imagined that the local name chewink used generally among whites in parts of the East has been imitative of the Delaware name, yet the distinct character of the bird's call could be considered as the source of the name in any group of residents, white or Indian. The occurrence of the single Delaware term applied to three distinct bird forms is a corroboration of the idea previously expressed in respect to the basis of classification of birds by their utterances rather than by morphological characteristics. This is another truly old bird name among the Indians of the Virginia Algonkian area, for the Topsell manuscript (1614) gives "chuwheeo" for the towhee. (See reference to Swanton, 1914.)

Mémeo, pileated woodpecker (Ceophloeus pileatus abieticola *Bangs*): This great bird is a figure in eastern Indian myth and legend. The Delawares interpret its call into English, hearing it as *wet! wet! wet!*, a sign that it will soon rain. The bird's beak was used to clean out the ears of a person afflicted with deafness.

The name *méme* is unquestionably an old one, general among Algonkian-speaking tribes of the North Atlantic region, and an ancient representation of the bird's call unchanged through time. In the Wabanaki tongues we have *méme* (Penobscot), *máma* (St. Francis Abenaki), *méme* (Ojibwa).

Mämaxókwəs, "mémeo red head," red-headed woodpecker (Melanerpes erythrocephalus (*L.*)): The apparent relationship of this to the preceding bird is responsible for its secondary name. Exact identity was uncertain.

Mé'k'hɑm, "pump," bittern (Botaurus lentiginosus (*Montagu*)): Here is a correspondent to the utterance of the bird as it has appealed to European ears, described graphically by authors as related names appear in the Wabanaki area; *pokhámənəs* (Penobscot and St. Francis Abenaki).

Káxko, great blue heron (Ardea herodias *L.*): This echoic term is another constant in bird nomenclature of the eastern tribes, viz. *kásko* (*kask^{w}*) (Penobscot).

Áhasu, crow (see under descriptive names): This mimetic term corresponds to Wabanaki forms, *kagó's* (Penobscot).

Á·kawán·eo—Mətéwi·le, American and red-throated loon (Gavia *sp.*): The first term is a form of the sound of laughter uttered by the bird, as the informant added "ha ha kowane, ha ha, he says." The second was not clearly translatable. It is a cognate with the name applied to the bird by the Wabanaki people of northern New England, *mədéwi·le*, Penobscot, *madawi·lá*, St. Francis Abenaki (see Gull below).

Ka·k^{w}, wild goose (Branta *sp.*), *swan* (Cygnus columbianus (*Ord*)): Informants were un-

[12] An appreciation of the same quality of its song as that sensed by the Indians is shown in the following words of F. Schuyler Mathews: "It is not possible to listen to the melody of the Song sparrow in early March without realizing for the time being that we are released from the cold clutch of winter and set down in the comfortable lap of spring" (*Field book of wild birds and their music*, 1904, p. vi). In the body of his book (pp. 111–123) he devotes about ten pages to attempts at musical transcriptions and word equivalents of this bird's song.

able to differentiate the names of the two birds. The swan to them is nothing more than a vague memory. The name is derived from the flight call of the goose, it would seem.

Ákawanéo, gull (species not differentiated) (Larus *sp.*): The Delaware notion that the bird announces itself by the cry *ákawa-* is related to the Wabanaki idea in the vocables *ki·αksi·s* (Penobscot), *kiákʷsi·s* (Malecite), *kákwi·s* (St. Francis Abenaki) as names for the herring gull.

Po'pó'kus, quail (Colinus virginianus (*L.*)): The name is derived from its call, which to European ears suggests *bobwhite.* The same name appears in several forms in eastern Algonkian tongues as *popókus* (Oklahoma Delaware).

Pa'pá'ko, ruffed grouse, partridge (Bonasa umbellus (*L.*)): The drumming of the male bird is denoted by the verb stem of its proper name.

Ki·kí·pus, chicken (*domestic*).

Migrational lore of the Canadian Delawares has been collected recently by Jesse Moses, a member of the group, and placed at my disposal for use in this report:

All feathered wildlife that cannot endure the severity of the northern winter migrates southward in the fall in the order of the first to leave in the fall being the last to return in the spring.

The small birds and ducks are believed to have chosen their mates before returning north, while the geese return in flocks leaving the ganders to battle it out for their mates on the breeding grounds.

Occasionally some of the hardier birds, such as the song sparrow and jay, do not go south for the winter, which indicates an open mild winter.

An early migration either way portends an early change of season. The non-return of normal bird life means a lean year, while an unusual number augurs plenty. The presence in this area of the snow-field birds, white owl, northern lark, waxwing, and snow bird, means an unusual depth of snow and severe cold in their regular habitat.

It is known that birds, ducks and geese, return to the locality where they were hatched, with the parent pair having priority in their particular nesting place.

The V formation of flocks of ducks and geese in flight is believed to be held for reasons of protection. In flight the neck can only be carried in a straight line and the head has very little range of turning. So the position and behaviour of the leader is transmitted visibly from him or her, as the case may be, down the line by that eye of the follower on the inside of the V formation, while each one in the flight has open vision on the outward side. Signals of the intention of the leader are sounded and relayed by others in the flock.

The sense of direction in flight by day or night is held by the calling of a manitu, according to which one is to govern the coming season, be it winter or summer over which the manitu of the north or the heat of the south is to rule. There is another belief that the rolling of the thunder northward or southward in the late winter months indicates whether spring is to take over soon or is to be pushed southward again for a time. These signs indicate the struggle taking place among the manitu forces over the question of control of season.

High-flying flocks are believed to foretell lean physical conditions for the approaching season, low flying flocks the reverse.

The foregoing observations are recalled from narrations by my uncle Cornelius Moses and some other old Delawares.

We have not as yet recorded the belief among these Delawares that small birds migrate on the backs of geese, loons, cranes, or other large birds. That this legend has not been recorded seems strange in view of its occurrence among Wabanaki tribes farther east who are linguistically akin to the Delawares.[13]

[13] The extent and variation of this belief among northern Algonkian-speaking tribes were made the subject of some review and discussion in an article by the writer published in 1921 (Speck, *op. cit.*, pp. 374–379).